Angele and the construction of the construction of the contraction of

ELEVENTH YEAR 1 (510) JANUARY 8 1988 16 PAGES -- 3 LEI

Now, at the beginning of a new year, we are calling on all the states and peoples of the world to do their best for the new year to mark important steps on the road to disarmament, peace, solving conflicts through negotiations, achieving new, democratic rolations based on the principles of fully equal rights, observance

of the sovereignty and independence of each nation, noninterference in internal affairs, complete renunciation of the use and throat of force

Brum Bresident dibadae Cesageceda Bru Alergen gefterminger banergeebereite foge begertorinteleen Maeceben munet Verbrerbinbere

The beginning of a new year is, by tradition, a time for a balance sheet of the nebbyeneats of the year that has passed, for sketching the provious for the future. For itomonian graphs, the items of have offered ground-reasons for upibalism.

reasons for upibalsm.

1 his New Year Message, President Nicolne
Ceauseseu undertined that
in 1987 the Itomaniae
people led by the commundst party had had
outstanding achieveneuts
in socioconomio develcontent and despite diffient international condilions, had traversed a now
slage on the path of raisting our homeland to now
heights of progress and
civilization. A substantial
growth was achieved with
inituatrial and farm output, in all spheres of aclivity. We also realized
important invosiments.
New production units and
sociocaliural establishmeots ware compicied.

meols .wars . completed.

RESEARCH, PRODUCTION

PAGE 3

were seared in science, education and entired articules — under factors in the many-sided progress of our homeland.

The Homanian propie's great achievements in the years of socialist construction, therefore in the first lay years of the eighth five-year plan period, inc, strongly prove the correctors of the policy promoted by our communist party which creditably fulfills its role of leading force of the whole nation on the read of building the justest society, that of socialism and communism.

For these remarkable

For these remarkable achievements, President Nicotae Ceausescu extended his warm congratulaflone to the working class, the pensantry, the intelligenists, to the whoto pooplo, further on showhis that we onice the now year, 1988, with clear-cut plans and programmies for our work

SCIENCE - A DECISIVE

FACTOR IN IMPLEMENTING

DEVELOPMENT PROGRAMMES

in the long run, till the year 2000,

year 2000,

The Nathmal Conference of the Party, the revolutionary worker demarary bodies and the Grand Nathmal Assembly approved the plans and programmes of work for 1988, are appropriate measures for the elimination of this year's shortfalls, the improvement of aell-vity to all areas and the unfilaching haplementation of the targets for our homeland's seriocomunic development starting on development starting or the first day of the new

ganizing work hi oil scotors, haproving management and work with a strongihening ordee and each one at his workpia-

AN EFFICIENT

STRATEGY

(PAGE 3)



ELENA CEAUSESCU anniversary

Eleno Caouşescu, membar al the Executivo Politicol Commiliee of the CC al the RCP, First Deputy Prime Minister, Cholowomon of the National Council of Science and Education, was leted on her birthday and long octivity in the cammunist and working class movament during a ceremony held in Sincle resort on Thursday, January 7.

The calemony was ottended by the General Secretary of the Ramonion Communist Party Nicolee Ceauşescu, Iuil and altarnale mambers of the Exacutivo Political Committee of the CC at the RCP, secretaries of the Porty's Central Committee, members of the State Council and al the Government.

in that lestive almosphare, Eleno Ceausescu was honded the letter of the Executive Political Committee of the Central Committee of the Romanian Communist Porty by Constantin Dascalescu, member of the Executive Political Committee of the CC of the RCP,

LETTER OF THE CC OF THE RCP EXECUTIVE POLITICAL COMMITTEE

The letter of the Executive Political Committee of the CO of the RCF addressed to Academician Richa Cesusescu, D.Sa. on her birthday is highly appreciative of her long setivity in the communist and working-class movement, of her continuous and working-class movement, of her contributed to the fight for the country's social and national itieralities, for the revolutionary transformation of society and ine huiding of the new destiny of society and ine huiding of the new destiny of society and ine huiding of the new destiny of society and ine huiding of the new destiny of society and ine huiding of the new destiny of society and ine huiding of the new destiny of society and necessary and people give a high and necessary societies, to your destive initialist as a member of the Executive Political Committee of the Contribution Party Fight

Deguity Printe Minister and Chairwoman of the National Council of Selonce and Induceding — to the substantiation and earlying luid citest at the grandings place for the organization and neederoteation of profilestion for a higher productivity and expandite efficiency, to the attainment of the acquisity of the new revolution in soluter and originalization and of the new egration revolution. In promutation of the Party Programme, the letter of the Party Programme of the first of the letter also lightly in a gairfity of the letter of the lightly find agivity of the letter of the lightly find the letter of the lightly find agivity of the lightly find agive the lightly find the lightly of the lightly find agive the lightly find the lightly of the lightly find agive the lightly find the lightly find agive the lightly find the lightly find agive the lightly find

(PAGES 8-9)

DEVELOPMENT IN 1988

THE SINGLE NATIONAL PLAN

OF ROMANIA'S SOCIOECONOMIC

The volume Research into the Chemistry and Technology of Polymors by Elma Ceauseisn has ecceutly been put out to

naokoup, lite Russian versian of the valuable work printed by the welt-known Nanka publishthe well-known Nanka publish-lag house of the Academy of Sciences of the USSR, enpervi-sed by academicien V.V. Koc-sak, is added to the previous two volumes lasted in the USSR is 1981 and 1983 — The Stereo-epecific Polymerization of Iso-prene and New Research Into the Fight of Macromoleculor Compounds, respectively. The ovent is a telling proof of the heen interest shown by the scientific world in the worh of the prominest Romanian solenthe promiosot Romaulan soien-ilst widely ooknowledged on all

tial widely coknowledged on all meridione. The new releaso highlights lie greet prosize enjoyed abroad by the outstanding contribution of Academician Elene Cenusescu, D.So. to the progress of chemistry, particularly in the highly luptes and important field of polymees. The Moscow festivity occasioned by the roleoso of the back gathecest numerous Soriot scientific personolities and publishing houses, other scinnists and specielisie, representatives of the Foreign Relationships Socilon of the Central Committee of the Communist Parly of the Soviet

of the Central Compilies of the Soviet Union and of the Ministry of Foreign Affeirs of the Ministry of Foreign Affeirs of the USSR.

In their speeches, the perticipants highlighted the personality of the prominent Romanian scients!, Academician Elena Ceausescu, DSc, hee remorkable roniribation to dovoluping the science and technology at polymers, to enriching the gr ul polymers, lo enriching the specialized literature, th selfing certoin prublems of great eco-nomic interest ou selestific hatioling the Ressian version of the new volume carrying en unistanding scionific velue, the partinipacts expressed their cenvicino that it would moke the nelicevolenis est preocespations of Romanion sefontific research heller hnews obroad, contributing to the development of the relations of rooperolion and the consolidation of licenoling-Sevici frendship, of the culloboration between the colentists of the lws countries for their unstual henefit.

Assecting the work as a cow and exceptional achievers of the speakers prioted out the important role played by Acolemician Elens Cesusess, DSo in the development on monegement of this school, the impulse given to the preoconpallons for theoretical reacconworks coreying an important applicative pulsuite, for designing modern, highly officient teutuningles.

technologies.

The activity corried out in the field of solonilflo research by rield of solenililo rosearch by Acedemicien Elena Coensoccu, DSc, her lonoveling essentiel contributions in the lield of meoromoleouler chemistry, molecialized in works of greet volue for solence, for the progress of confemporary chemistry, nre widely schnowledged on an international plone.

In Ansiria, the Buhmonn publishing house hes issued the volume? Rieno Ceensoccu—Progress in the Chemistry and Technology of Polymere. The work was released within a from age-paying event which look place in Ylenne et the Austrian Cultural Centre in Polity Palace. Public tilo personalities, sci-

ce, I'nhiio lito personalilles, sel-onitsia, directors and represen-tetive of firms and research and production inciliales in the ficial of chemistry, representa-tives of the lectuical University in Vionne, of the huduess elecce. Public Ilio personalliles, sci

A worh of high ecteniiio slasderi, iho voisno Progress in the Chemistry end Technology of Pulymers highly evidences the personelly end unitetuding scientillo recessed of Elese Ceaugrecu, whose widu ecilvity is like dumain of recessed, of the organization and development of science and expenses of economics and expenses of economics and economics. devolopsions of eclenco and education in our country is organicelly integrated into our perly ond state concerns in pul the goins of ententitie knowled-

go in the service of the muffi-lotered progress of the cousiny. At the same lime, this new release from the actendific work of Bless Ceanyosen reflects once of Eless Ceanyoeu reflects once more the high exteem and valualing her outstending more enjoys on an international gione, for coolribution to the enisrgoment of solonifite knowledge, to defining the methods of using the trule of research, of the now solenifite disenvertes in the

lug cenent results of the rosearch initioled and headed by Academician Elons Cesusesen 13.8c., belongs to an important suite of works devolted and practical especies of mecromolecular chemistry. In his proface in the volume, the well known Amirias scientist, professor durist Ernst Wogrolly points out: "It is the first lime that such a work is feed in Austrie, rounding off the long suite of colentific studies of Academinian Elono Cenuseson, D.Sc., which ischades over 100 scientific papers and menographs in this field of eclonee — a work which has arsused the interest y Acederuleien Elons Cesusesen which has araused the interest of specialist circles in vertons

constrices.

These researches — the enther of the preface pulnis out
anxi — which deal with highly
topical themes such as the ste-

reseprefice polymerization isuprene end batediene, enfour polymerization, the synthesis plasticizers, hydrocerboe reside the preparation of frenspolypeutenomee bave found international recugnition through the supolulment of Academician Elena Cenyoscu, D.Sc., hummersus ocademie forum throughout the world.

The other sprakers and the participants in the Vienna festivity paid a warm irbute is

participants in the vicina testi-vily psid a tvarm irfbuid it. Academician Elenn Ceaugeser D.Se., enugralulating hor en-hee birlidey, wishing house successes in her nobli-ocilylly devoted to the progres of spicace. To the prospects ocilvity devoted to the progres; of selesce, to the prosperity i specialist Romanis, to rally! the schentists and men of lette everywhere in an effort to mekine results of rescorch, the breakthroughs of the human gamins serve people's welfare and happiness, to fulfil the people espirations after freedom, progress and peace.

cont. from page 1 //

erch, her role in the develop-ment of the Romenian science, education and culture, in the rallying and organization of the forces in this sector to the end of ensuring the country's mul-illateral progress and the soc-cess of the revolution in science and technology in Romanic, uf enriching the spiritual life, enriching the spiritual life, broodening the knowledge end raising the level of outture of

The Exoculty Pullifer Con mittee olso underscures that the life end eclivity of the schular-ollizen and polifician Elrna

Romania strongly relievalra its determination to develog its re-lations with all the states of the

world, whalever their secial system, to do its best and con-iribute to the elisticmont of manhind's aspirations after dis-

ons, representatives of some or-

ula, who congrotulated film and the 40th anniversary of the lin-

public's proniamation and on the New Yeer's Evo.

In his oddress on life ownston, liarssam Barahai, anthassador of the Syrion Arabi Hepnhilo, doyen of the diplumentative perileipation of Romenia, under President Nicola Presiden

undor Prasident Nicolac
Coauşesou's leadership, in the
works of the United Nations
and of other international bodies, whore its octive presence
is menifest both in an octive
collaborotion and in the underslending of its responsibilities

slending of its responsibilities with regard to the major world

Issues.

Ilighilghling that Ihn diplemats cooredied in Bucherest
followed with keen interest the

flon she mokes in the essertion of Romonian science, in the delu the use of srience and culturo in promoting the lufly, blenk of peace out understand-

lng enoug penpirs.

Reference is made to the netivity carried on by Academirian Elena Ceanseson, D.Sc., in
her copnelly us chalrwamen of the "Scientists and Pears" Na-tional Cosnell for the strong-thening of cooperation and col-faboration with other organiza-tions of scientists of over the

gnording posce, for discruna-ment and the removal of the threet of a unclear catastrophe, fur selence, education and cul-lure in servo exclusively civitzation, conperation and inder-planding nations, their free and dignified development, people on lits anniversary, lito-se altending the eccenary wormly emgratidated Elena Ceausesru wishing her a loos life, happiness, health and prelife, happiness, health and po-wer of work, furlier successes in her activity devoted to the citaliument of the gods set by the Thirteenth Congress and the National Conference of the RCP, to the building of the multisalerally developed sarial-ter water and transported. ist surlely and itomania's ad-

AT THE BEGINNING OF A NEW YEAR

wervingly fulfil all the plans and progremmes which provide for lie general progress of oar honseland, for higher malerial and spirital standers of living of our notion — the supro-me aim of the Porly's policy, the essence of the mullilaterally

doveloped socialist society.

After reviowing a series of objectives of this year concerning the socioeconomic development of Romania, President

ment of Romania, President Nicolne Ceausesou sald Ihai i futernational evects of groet importence look place in 1987. The arms reen has continued, a number of conflicts have persisted and their scope has even grown. There were cases of harsh interference in the domestic effairs at stoles. mesilo effairs of stales.
The world oconomic siluction

The world oconomic sligation continues to be perificularly gravo. The position of the developing countries has been eroded by the policies of dominolies and oppression of international monopolies and finoncial espital. We wire the development of new forms of colonicials cale, of oppression of peoples.

of new torms or commens rend, of oppecssion of peoples. However, we must show that the outgoing year has seen an intensification of the actions of the antiimperialist, democrotic, realistic forces, of the sleuggle of people everywhere for a new, democratic policy, for diserracment, nuclear disormament above all, for a duroble peace, for fully equal relations and ceapoet among all the nations of the world.

fully coasi releions and cespoct among nil the mailons of the world.

The irealy that the Soviet Union and the Uolted States of America algued au climinaling infermediate and shorter-cenge missites is a historic event, an achievement of the recitiff policy, of the sirungle of oil peopics. While associated fig. as a major alop, we must any however, that those silff avn in the world huge moreon arsenals that can desiroy deveral times over the whole monkind, indeed, life on our planet, Sn. that fundamental question is to step up the actions for new necoda to redoop alpatestic nuclear weapons, for an end of missions of the devaluation o

enmpielo eliminolion of nucleer wenpons. la lito nucleer age, no

wenpons. Ia the nucleer age, no question ie, no question oen be, alore imperient then the compicie removal of nocice weepnns. More these et ony other lime should the European coontries, where e good part of the nucleer arms ere located, take firm section to clicitate nuclear weapens on their confluent see its world over.

At the some time we must de cue hest for cognitation to start in 1988 on cutting down convectional arms in Europe, ellin Inaling chemical woopeas end achieving o new belance of arms at es over lower level.

Romando is deformined to take sellon for the sil-Europeas conference to end with the host

conforence to end with the host

sonforence to end with the best possible results, for the exponsion of the rotations omong all states of our contitent, and the conference of a united Europe whatever the social system of its neitans.

We will make greater efforts to develop inter-Balkan coopecutions and friendship, to oreate a nuclear and chemical-free zone in our region without foreign iccops and milliory bases, for a broad cosperation in economy, loohnology, selecte, culture and other areas.

Romsnia will step up its efforts for an end to milliory coolints and the ecselution of problems by way of negotiations, for the holding of as luternalleal Media East conference.

Now, when the sew year is drawing near, we call on eli states and result results and the coll results of the left and the conference.

followed with keen interest the activities of Romania'a Presideal in the world orena, the offerts be made for the cause of disarmament, economic development, ecoperation, international poece and security, the doyec of the diplometic corps mentioned that under President Nicolae Ceauseson's leadership Romania had marked leagible progress in recent years in tis economic, cultural and secind development, and expressed the condidence that that path wented be followed the next year as

fu hlm, President Nicolar Penusesen lank the thur, saying President Nicolae Cennse eu pointed out thei on siep-

noung ather things: We are calling a year with coriain group results in world developments, or better said, with certain impes that the steps mada this year will emiliaus, hal action will be luken in such u way that 1988 may mark new important steps towards the citminalion of miricar arms, to-wards communicant discreta-ment and ramoval of choosical manhind's aspirations offer disarmoment, pooce and the climiuation of molecer weapons,
of the expirations of all the nolions of the world to live in
freedom and independence.
This policy opened to nollalincation and peece was highlighted on the occasion of the racopilon by Nicolae Ceausesen of
the beads of diplantatic missions, representatives of summ orwas. We all harn appreciated the

we all harn appreciains the fost that the Saviet Union and the United States of America signed the arrard on intermediate-and sharler-range missiles, but we all know that hugu anomis of unclear orms are still jeff in the world, which can be the states of the saviet but an all the saviet with the saviet but are saviet to the saviet which can be saved. desiroy this pinnel, its life se-veral lines over. That is why werm lines over. That is why
we must wark sill mann firmly
for new agraements to be signed next year on strategic arms,
up builing lests on unclear
arms oud horring the actions
unual to milliarize outer space.
We wish that in Vienna test results may de nelileved at the Conternace on Disormomont and Confidence Building in Europe. Let us work in such a way that Eucope moy becumn s conlinant af equal equabora-lon, e united Europe nontejun-

tion, e united Europe noncelli-ting solivoly lo solving all com-plox Issuos, luciuning these of underdayelopment.

We wish is develop amply We wish is develap amply Balkon cointiens with a view to luming this region into a zone fees of nuclear out chamlost area and foreign militery bases and feeops. At the same time we most strongly emport the occation of such zones in vnctous regions of Europe and all over the world.

On an economic pieze, this your the general situation has worsoned, more paclicularly the developing countries. We need o new interpational financial system. An end must be put to the financial and monetary fincingling which in four countries a cortain major affects. prosenia a cortoin polley simed proteins a cortoin puller simed, against like punter countries, contint the developing openities. Firmer measures are required as fer as price stability is concerned, for a free inlet necessary in the course of protein in the course of disagnate minutes of various barriers about the course of the co

onnfidence that that that would be followed the next year as well, in all domains.

In closing his eddress, the doyen of the diplomatic entry addressed President Micolaic Coauses and Elona Cenuscau, the Homanian government and geode health, prosperity and poace on health, prosperity and poace on health of the diplomatin copy, on the New Yest and on the 10th auniversary of the Republics preclamation.

Thanking for the constantiapu.

Next year we should like roal thous nelley! to held establish negligible to begin, under the sargle of the United Nettens 19 impas brill as petter and more gaulantion; between the development world.

helwene arining — nu which more than one trillion dallare more than one trillion dellare are spent — and the stibulion of the developing emotiles whose foreign debt lops one trillion dellars. As discussed in intercalloned hodies and at spe-rial conferences this year, the-rols a close link briween de-velopment and disarmanch problems, and we must work for a narrowing solution to for an appropriate solution to

end he put to all actions of in-irrierouse in the utfairs of uther states, that the independulter sinies, litat flic indepondence on an anvereignly of cach
nution, ifm right of each penalo
in free development, according
to its wish, free from ony fornight laterfeeches be unfilledingly observed.

There are serious problems
but we are convinced—also
labing certain achievements of
this year as a basis—flot the
neonles. The realistic forces have

country's believements fro a contribution to general development and in the cause of present development and in the cause of present inch included. That is why in

upfug rountries and the devel-

this year as a basis -- Dot the peoples, the realistic forces have the nuight to determine a new pulley, a new thinking in order that a passage mey its made to salving complex issues in a demeeted way, with the porticipotism of all the stoics in the world, irrespective of size of social system.

Wa ore in foveur of a still gronter cole of the United National Organization, of other international boules. We firmly speak up for a solollon to

speak up for a soloilon to dispoled ismose exclusively by way of negotiations.

As for the situation in Romania, you have been fring here, you know both our prescenpations, what is spod and what is wrong. As a malier of foot, in the last fow weeks we have debated at length, those motions is our democratic bodies, starting with the Notloyal Conference of the Porty and onding with the Grand National Assembly!

ROMANIAN NEWS

Constitution of the state of th INGVILLORING PROGRAMMINGS

There is no doubt that SCIENCE is the most dynamic loctor in the strategy of developing the Romanion economy and society. The trousition to a monthly intensive state opened by the Thirteenth Congress of the Party, asserts science — understood oot only as lumbomonthly and applicative research, but as the entire process of knowledge - ns a decisive lactor in fulfilling the economic and social objectives conditioning the altinument of the medien level of sociaeconomic development and the effective proticipation in the world flow of values.

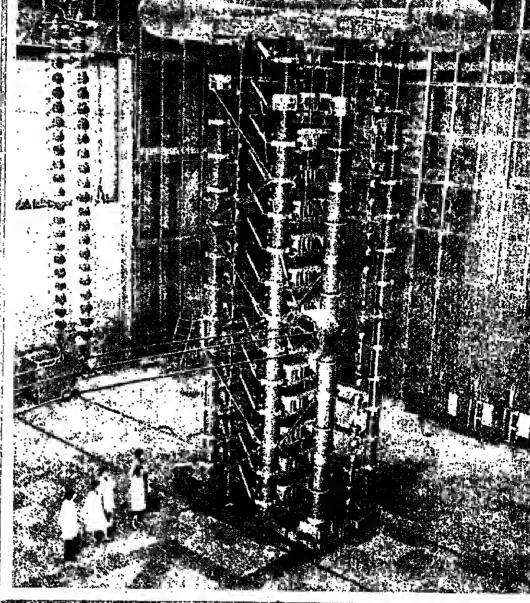
The involvement of science in aconomic and social processes con-cens the organization of the educational system so that it and provide a roserve of highly troined sloft, on a pur with the needs uf a dynamic economy, that also the direct process of introducing the gains tynomic economy, that olso the stiroct process at introducing the gains of science and high technology in the production process. The relation between the two facets of the question is strengthened by a powerful exponsion of the field of scientific research, table to provide unswers for all the immediate requirements of industry and the economy in gonorel and to ensure a stock of solutions for the long-term development. All these fundamental orientations and priorities display their beneficial offects agninst the general buckground of the increase in the overelf standard of welfare and culture, the central phenomenon being itself strongly influenced by the conflitude of scientific nurl lectrice-economic procecupations involving the mujority of the guinfully numployed popu-

Therefore the ell-embrucing character of this phenomenon refers not only to the economic development, but to the entire pracess of fulfilment in ull fields of human activity. In this context, the tole incumbent on aducation refers not only to the years spont by youths in schools and incultios, but to the whole system of qualification and schools from incurros, that to the entered of qualification of all stoff, to the ensurance of a meetium standard of professional limining for all working people, the organization of a penind retiniting, starting from the idea that modern inclusive the techniques of continuous study.

In this vast and complex perimetre the functional link of all locals and aspects related to the assertion of science in the Romanian economy out science, from education to research and design, to the economic results they produce, is ensured by an ample and coherent sys-tem centered mound the National Council of Science and Entacation hended by Academician Elena Ceanyescu, D.Sc., a trochooking party and stale activist, a scientist of world repute, an outstanding perio

The speech made by Elenn Countesco of the plenary meeting of the National Council of Science and Education of Movember 18, 1987, offered with scape guidelines, in a unitary conception, which of became an effective programme of work through the manimous will of the representatives of scientific research, technological engineering, design and education. On that occasion astablished were both general objectives of research, with special stress going to technological modemizotion and curtailment of unlerial and energy consumption, to the improvement in the quality of products and the efficiency of the productive process, and losks specific to each field of activity.

"In all branches of the nutional economy", Elena Counsescu underlined in her speech of the plenuty meeting, "research has to participate directly in the fulfilment of the provisions of the preduction plon in the bost possible conditions, contributing to the good organization and beltorment of the whole performance in tuffilling the plan late ongoing year and for the whole live-year plan period. As a motter of fact the direct link between the octivity of scientific research and that of chircollan and the short- and long-range tasks of the octanger. and social development has been the basic characteristic of the progromine wacked out by the chairwomen of the Notional Council of



RESEARCH, **PRODUCTION**

UNDER THE SIGN OF TECHNICAL AND SCIENTIFIC PROGRESS

more obviously epprace es a di-rect production factor in Romorect production factor in Romonien occommy cannot be sufficinien occommy cannot be sufficinien occommy cannot be sufficinien occommy cannot be sufficientity explained by a reference
it the internal dynamics of the
ficid. Boccuse the ect of scienillio creation folls within a definite perimeter nf the acciol
order on which it deponds and
to which it is related, while being a consequence of the develing a consequence of the dev

The colonistic dimension of development primarily concerns the form of progress which we have constitutions constitutions constitutions constitutions constitutions of attendance in the croation of laking more add turning to advantage the control of the contro desults of solentific research in practical activity.

We are witnessing a new sociolist with deep-galog implications for the production apparatus, in sections of the industrial struc-

resources on the one hand and the requirements of economic growth on the other call for a now copduct as regards resour-ces and for a now stratogic tino of dovelopment. It is over more of dovelopment. It is over more obvious that in future we shall have to ensure a high-passed development in the conditions of a progressive redection of resources inputs per unit af product and, at a certain level, even of inputs in absolute values. It is also evident that one of the angelopment of the high-tech branches characterized by a big volume of the research and technological another the research and cal engineering activities and a large share of highly skilled

This strategie line laid down to a strategie tine lain town as early as the Ninth RCP Congress, had in view the priority development of the machine and metal engineering industries, of chemistry and in the long run, of electrical angineer.

ing ond electronica, snlomation and robotics included, of the eulomated data processing equipment, fine mechanics, oplice, fine-synthesis and small-tonnege chemistry, and the growth of the shere of industriel eclivities in ell the other scolors of the conomy.

As a result of this sleeiegy, over 1895—1885 the productiou of the mochino end metal engineering industries grew 12.9 lines, cod the electrical eogineering and electronic industries 15 lines. This phenomonon is visible also in the either high-lech bronches, even if their share in the overeit value of the social product is rether small. The promotion of the high-lech brenches, with the qualificities and especially quotitelive development of the solonilitie research field. scionillic research field, beers positively on the entire branch and on the national economy as a whole. Thus, the modernizalion and the growing shero of the above mentioned sub-heon-ches in chemistry and machine enginaering will result in a massive updeling of the whole industry. By achieving a ceven-7.5 pec cent growth reto in the engoing five-year period in the engoing five-year period in the mechine engineering industry a share topping 9 per cent of the 1980 marketable production will be hold by new and updeted products, which will have a renewing impect on all the other hrenches and equip the whole inductry with modern technologies.

ln ecder to got an accounts plotne of this evolution we should cires the fnot that the sector bossing the highest development pace will be that nf scioniffe reserve, technologies, the contribution made by scientific research to alleising all these objectives will leave bohind, as regards both page and volve, at the other fields of sellvity.

AN EFFICIENT STRATEGY

Through its guidelines and phicolives, the working pro-gramme of scientific research this year is a poulirination of the comparishing development. this year is a confirmation of the responsibility devotates on this important field in fulfilling the production tasks and the general is gots laid down by the Thirteenth ROP. Congress, The applicative character of the programme reinforces the relationship between fundamental and applied research as two innertents, clements of the single process of development apply attention between the relative Romanian scenarios. While noting the contribution made by Romanian kelentific research. by Romanian scientific research,

ischnological engineering and design in the general development of the economy and society, the Chairwoman of the Mational Copyroli of Sicience and Education, A addengidan Elegan Centeson, DSc., highlighted both the achievements and the singular engine of the prive of technological mederal application of industry which has an far average over 1,500 enterprises and which directly involves bell the gamelite respective conducted in the specialist instituted and high corried on by altifuted and high corried on by a like the corresponding the second of the corresponding to the corresponding the corresponding to the corresponding the corresponding the corresponding to the corresponding the corresponding to the corres

eew reality imposed by modern industry which on the one hond recomments the Iroditional line, in keeping with which research must answer the doily problems roised by industry, as well as the modern line, according to which industry is called upon to provide optimum conditions for the fast application of the gains of research. The slight differences between the two times piezed far that extremely fertile outlook in which science imposes both the industrial in

science imposes both the industiged rates ond the atrictures in a permanent confrontation with the requirements of a vost development strategy.

This year, Rementan scientiffor eticarch is faced with highly impociont and urgent lasks. Research is to make a higger conticion of an and urgent lasks. Research is to make a higger conticion of order of the exploited onergy cesouroes the co-covery factor in the exploited in a policiton of ordered deposits is to reach its per cont. Strongh the application, of modern explaits—tion technologies I the recovery degree of metal about aurapass of ner cent I the heavy-duty-distribution of the heavy-duty-distribution of the heavy-duty-distribution of the period of the recovery degree of metal about aurapass of ner cent it in a prolimental industries should remay their production in a proliment of the period of the recent, the classical industries should remain the main into indicator should for period of the period electronia description of the period cent, the class should research should be in the last applications of physical services for the development of the last supplications of physical services in the last services and splicitives is the baseling year and of the entire law year also period. onening your and of the entire



ADVANCED RESEARCHES

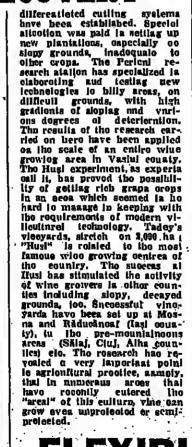
Romania has a national cen-tre of physics as port of which researches are mode in the field of using afomic energy for pracefut purpuse. By means of cyclotrones, of appuratus giving particles high energy sad other equipment, specialists study the mechanisms of nucleus informa-tion and structure, the process of nuclear lission. To this end of nuclear lission. To this end they use X-ray and gamme ra-diations delectors, detectors of charged particles, looluding beavy tons, lanization chambers, mass and charge identification systems, etc. Experimental data neo introduced in cumputers on nro Infroduced to cumpulers on the basis of a complex software. From among the auccesses of the Romantan physicians noieworthy are the results seored in the sindy of the structure of nuclei. At the same time remerkable results have been obtained in the reaearch of resoluted in the reaearch of resoluted in the reaearch of resolutes are secred by the appraach of other high-lech researches in the field of stomic processes, of the physica of heavy long. At the same time developed were applicative reaesrohes through the creatian of nuclear filters for microelectronics, the physica of

Original methads bayo been

lace of metals, semiconduc-inrs or certain insafating mole-rials, as well for identifying inpurities in semiconductors. Vorious insiditations using the properties at gas and plasma discharges, warinus accelerators and betatrans for non-destructive control, medical therspy, ele, have been designed. Also devised were installations and technologies for the vacuum technique — electron beam welding, metallio deposits, special ciloys oblaining. The Remanish researchers have orealed nuresearchera havo orcaled nu-clear electronics apparatus and dosintelers for nuclest electric stations. Together with German experts from the Max Planckifeldelberg Institute, Romanian
physicians have created an updaird postarederation aystem
tor obtaining goworful energy.
Fruitful scientific editaboration
has alan been conducted with
lastitutes in the USSit, China,
Yugoslavia, Czechoslovekin, Eost
Germany, West Germany, France, ino USA, Italy, and other
countries. Romanin boasis one
of ibo few institutes of nuclear
taclopy in the world; it elso
experts radioactive and stable
isolopea, end develops istotopic
iculnulogies with broad applicalions in the economy, blaingy,
medicine. LUDOVIC ROMAN M

HILL RECOVERY

The Romanfan vino cultore research has made possible the solentitio classification of coreals and the distribution of breeds according to the pedeculmotia pecultarities of each vine-yard. During the fust years, 18 new breeds and over 20 cloues of vine bave been ereated, being more resision to cold, droughl, discases and posts, Wine growing lechnologies have been modernized, diecoting the vines on etems has been letroduced, and



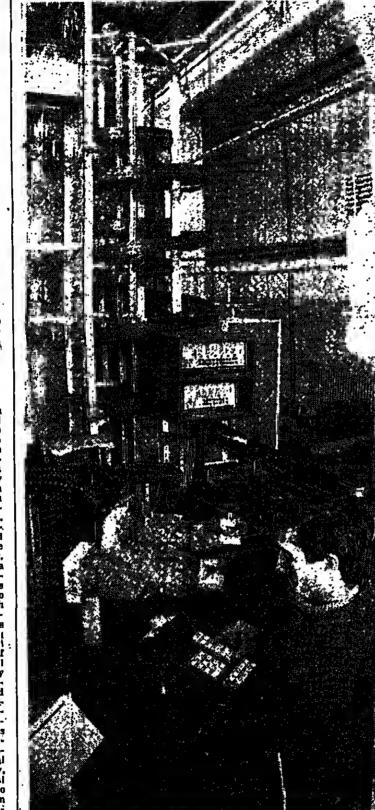
FLEXIBLE CELL SYSTEMS

Last year, a flexible cell workshop was commissioned at the Seminateer se Enlectrice. It is the fret of cellaboroling of the specialists of the limit with those of the Titan Institute of Scientific Records and Technologie Engineering for Machine. Tools, who worked out the projects: and gart of line systems of automoted supply for flexible sells. The new holisyement is part of an sample, sollon correlated to a large investment, which has pracificated to incomplete the large at the main works, starting with the "bot" eactors at the main works, starting with the "bot" eactors are in the processing solorer and the assembly works.

The first stage was conceded last year and subsyches, being done for a prev technologies size, and subsyches and subsyches and stage, the first plane, year, and the processing solution of the processing the modelles had been shall be a process of the processing solution of the processing solutions of the processing solution of the processing solution

AUTOMATION

The automation of production processes, the computer-assisted dealgn, the programming of economic activities are constant concerns with Remanian researchers who have worked out numerous studies, syntheses and monngraphs brought out in the well-known series of the Bucharest fechnical publishing house The Librory of Antumatics, Informatics, Electronics and Management. Of the latest releases we should mention identificate assistable de culculator a sistemeter (Computer-Assisted Identification of Systems) by Mithal Tertisco, Petre Siciea and Thoodor Popesen, a study taying stress on algorithms and the implementation on computers of questions related to industry, eavironment protection and other fields. The authors sel foeth original methods of the intifying solutions, of analytically sud experimentally modelling the processes under study. Another volume, Desfaurarea suprafețelor asistată de culculator (Computer-Assisted Unfolding of Surfaces) signed by losa Mariacaci. Aurelian Tăaăsescu and Radu Consantinescu bringa up intercaling applications of the Romanias-anade independența end Coral minicompulers, and af the DAF 2020 display. The work proachle un motompulers, and af the DAF 2020 display. The work proachle was also the study "Finite and Border Eiemenis with Applicatiuna in Machine Body Camputing". The authors, M. Gafițeanu, V.F. Potercyu end N. Minsiacho, nuto in the preface that the work is based on Romania's and other countries' experience in the realm of expanding aophisileated computing actions, especially that of elementa end border finite.



THE ROMANIAN LASER

Loser physics is one of the most lobulous domoins of modern physics. Sprung out of the crossroads of numerous fronds and directions, laser technology has preserved and enlarged its interdisciplinary character lotaly. It is successfully applied in material processing printing, medicine, telecommunications, optical processing of dato, metrogy, etc. Noteworthy is the fact that moking an analogy between the tirst 25 years development of toser and the development of computers over the same period of time, statistics show that lossers have outrun computers os regords their solling in the world market.

AMONG THE BEST

IN THE WORLD

years since the inauguration of the laser 'era', by the apprar-auce, in 1968, of the ruby inser

country produces carbon dioxido lasers ou a per with world trends, adspied for industriul use. Now, as well as in the neor luture, must demanded is the coolinuous ways corbon dioxide laser of 1.2 kW. Anuiher system produced by a country will be accounted. produced by us, equipped with computer-digital cooled, cuts materials with complex con-

Not long ago fi was 25 years since the making of the lirst itenianian insar. I suggested to dr. Vaslie Drägänescu, head of the laser section at the Contral Physical Iustituia (ICEFIZ) to tell us about Remanian lasers' evolution aleagated the world development of this selegific and technologic domain. ONE STEP AHEAD OF WORLD **EXIGENCIES** "There had hardly passed Iwo

"The Romanium insisilation for the lasor nitrhintion of sicci and lilunium, a new, bighly ef-

ficions icebnology for the herd-oning of mointile majorials and the nehiceomeet of majorials for the electronic industry is a world first, while the glass ia-ser and the needymium-doped, pulsed and continuous-wave YAG installations are on a par

with the best world perform-

the groot prospacts for the near future opened by losor technology in the fundamental and opplied

ances. They can be used for precision boring, micruburing, thermal irealments and tascrip-

"Also, lie He-No lover Inter-ferometres hullt in Itomsnio in various variants have parame-ires competitive on any markot in the world.

"Laser measurs and control "Laser measurs and control installations currently equip the Romanian industry and agriculture thouse to their great necuracy, especially in cantactics measurements. The laser measure and control opparatus also include optical-electric devices and microcomputers. They ore used on a large scale in alignment, leveling, distance measurements 10 km with an accurry of 1 cm), motima 160



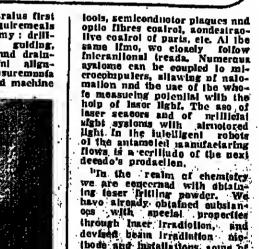
THE LASER IN A NUTSHELL

When an atom mayes from a lighter energy level in a lower one, it entity spantaneously a quantity of light to quantum of radiant energy railed pholody, carrier of the energy difference between the lower levels. Untitle the spontaneous emission of light, the stimulated emission diaser) takes place when the atom is determined to last trum the higher level to the lower one following a collision with a pholon. A runtingous pracess of this kind produces an available of lightfeat pholons. The lightly a "pumping" mechanism is needed in keep the phenomenon going. Generally, his archanism consists of live feeling mirrors reflecting the pholons and forcing them to cross several times the active muterial of the baser, causing a new availanche of pholons. One of the mirrors is slightly transparent, allowing the amplified radiation to issue under the form of a narrow, very intenso heam. The main charucieristics of laser light are: monochromalism, unidirectionally, coherence and intensity. Of the criteria used for classifying lasers we should mention two: the emission regime liquised or continuous-wave) and the typa of active material.

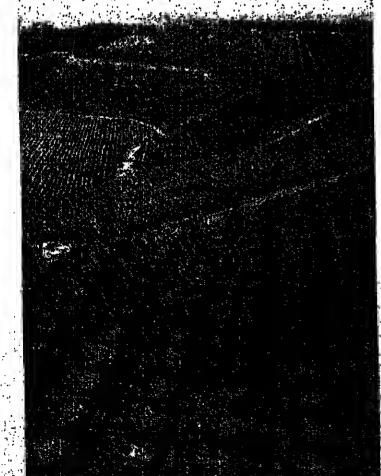
meires will an accuracy of s tenlb of a mieron), spoods, spatial deformation, and others. These apparatus mainly use low-power lazers with frequoey alability. "Technological research nod

development of the inser mea-

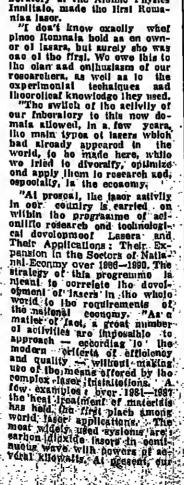
auro aad conirol npparaius (irst
of aff enawer the requirements
of the antional occurry: drilling and coal mines guiding,
conirol of irrigatios and draining ditches, industrial alignments, accurate meesurements
for floo mechanics and machine



have already obtained aubstances with special proporties through inser irradiction, and devised beam irradiction, and devised beam irradiction, acuse of those and installations, acuse of those world firsts. Joinly wift experis from the Dadget chemical culorprise, responsible according for proparing now substances and devising the requisite feednological processes. Some of dur rescribes condocrating substances and devising the requisite feednological processes. Some of dur rescribes condocrating substances and deviating the frost or fill about the fill sever fill according to the fill sever fill sev

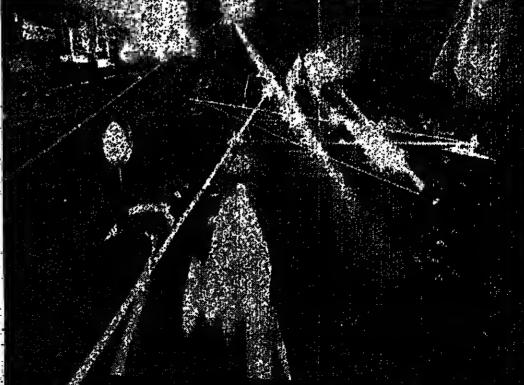






ood, in 1961, of the Ho-No laser, whea line colloctive of young researchers, lod by los Agarbiceanu, then head of the optio melboda in nuclear physics is becatory at the Alomic Physics Inntitate want the Line Physics and the Line Representation of the Line Represe

Inniitale, made the lirst Roma-



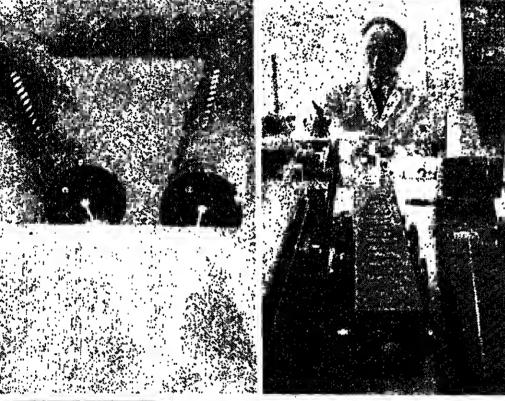


LOOKING MIO

As port of the recent ention-wide meeting deeling with tayer— Br. Althal Lucium Pasen, ill-rector of the institute of Physics and Technology of India-lion Equiument HFTAR; told up— the specialists of the institute and those working in industry, agriculture and mellicitum cuttined to page and page of implementing more rapidly these technologies in economy and research. Approached in parlicular was the question of expanding the industrial production of laser equipment in the rentral of appending to the production into of complex production line of complex products involving a large volume of intelligence. In this respect a better collaboration has been achieved between the specialists of the institute and livose in connuncy. Marchaer, multi-illsciptingly forms have been sel up in under to sulva impor-

premises for such Joint actions. Of late, our activity has been Of late, our activity has been tocused to diversifying types of lasers: IIr-No, CO₂, lonised argun, nitrogen, dyestulis, solid body, semiconductors, etc. In parallel, a significant increment has been recorded in the functional parameters of the existing lasers. Hence, my confidence in the possibility of expanding the number of laser applications. We have designed new types at lasers boasing superior eatimis. We have designed new types at lasers boasting superior ounlities, which are used for the processing of meeting the control of environmental pollution, for various activities in medicine and biology, research into plasma, preparation of images, interferometry and industrial holography. The systems of nitguing lasers with holium and aroun produced by us are our culty used in constructions and agriculture. The laser equiponent with enthun dloxido for ipnyeni with eurhun dioxido far





sinao iis adveni, laser ing slood oui lhrough tha occuracy of its handling and the officioney of its handling and the officioney of the grootes of insertissue interaction rediction. This has aroused a keen interest in the incidental interaction of laser in the medical iherapy and ourgery conjuncal. Beveloped for and adopted to lineap purposes were inserts with remission from ultravialet to infrared, with continuous emission or in short impulses and greater power on ino pulse, in parallel with the dovelopment of laser equipment of looks lields: ophinimology, goalroometed to the surgery of the continuous entition of option of the surgery of the continuous entitles of the surgery. At the same time we have the entitled in the incomplete in the same time we have the entitled in the incomplete in the incomplete in the same time we have the expression of photocongulants used in ophinimal of the incomplete in the i

Sinno its advent. laser has a cutting liva tissue, tissue eva-

ROMANIAN LASER **TECHNOLOGY**

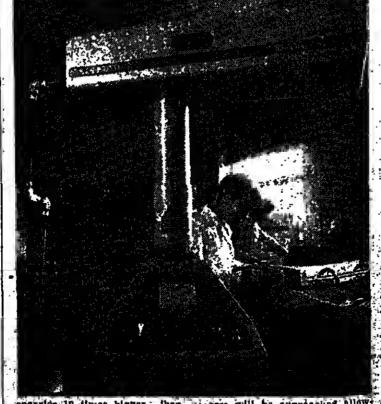
A laser technology developed by Roma-nian specialisis is bonian specialists to bo-coming increosingly more widespread in industry: the tonic nitridetion for superfi-cial bardening of metallic parts. The method, which consumer 50—80 per cent less energy than the cata-bitshed methods of this kind, ensures tarm cowings of mautished activods of this kind, ensures large oavings of matal, particularly offoy steel and special, particularly offoy steel and special attack with a high content of chromium, wolfram, nickel, molybdenum. At the Braşev Truck Enterprise, for instance, about 65 ieus of peris, especially cog wheels, pinions and racks are nilriduted annually. At the inol enterprisa in the same city, at the Pitcyll oar enterprise, at the Uniron works in Cluj-Napoen and many other economic units, the method brings in amust savengs worth millions of fal, method firings in amusif sav-fings worth millions of ial, The tonio nitribation leahno-logy is boing ganeralized in nil specialized onicryrious in this aomity. The soriat ma-nufacture of pliridolon insinilalions has sloried ni lbe nuclear equipment enterprise. Similor installations have recently started to be prorecently started to be praduced of an by other enfor-prise. Motaintoholes in Tire littres; the protetypes and small terries products factory of the institute of Research for Hot Scolors in Bucharists.

cullings allows the oniting of sleet sheets of up to 4-5 mm. Other installations oro Solar F3, designed for cutiling silicon plates in the electrolechnical industry. Needlin 15 and Heroulaes 25. Presooily wa have deviced a powerful CO2 loser functioning in pulsating regime, with a high frequency of repelication of pulsas, combining thus the advantages of issers with a pulsed regime with those of lessers operating in a continuous regime, being ablo

in supply poak-powers of scores of Megawatts and mean powers of 500 MW. On a world plane, such lasers have been couceived only in the USSR and in the USA. At the same time numerous laser installations have been applied to medicine.

Our programms for the engoing live-year plan period and until the year 2000, cover ambitious projects. Thus, is the field of CO, lasers the programmes slipulate the orbisvement of increased powers and of impulse

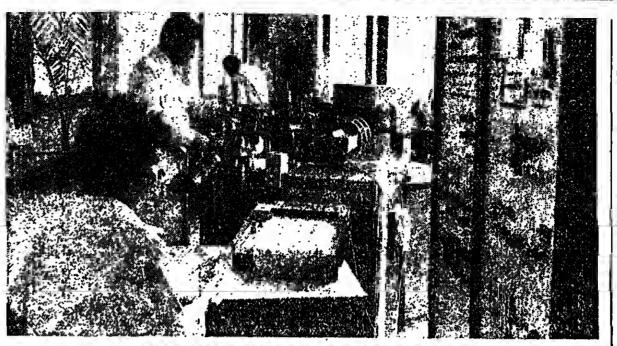




energien IP times higger than the risid of adjustable continuous theory with an active solid and liquid material, accordability will be obtained throughout the visible light domain in intrared and dilruviolet, brought closer by acquisited effects, garametric generation and generation of active materials with a wide frequency band Lusers to whim light will also be obtained with mulliple places of ambigion in visible-light.

For the example of the lagger of ambigion in the lagger of ambigions in the lagger of ambigious in the lagger of ambigiou

sers will be approached allow; ing for applications already id use an a world plan such a dynamia litheorraphy and hold graphy for injercelectronics. La sers with acmiconductors will be developed for nonmunications, and computer technology. Approached acq doveloped will be lasors with emission in little short impulsed (nice—and lone micreconds) by developing a sers with solid and dyesinfle Lasors with molality appute secon to partend a wife ranks of applications.

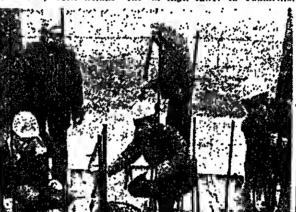


ON THE SCALE OF ISOTOPES

The Institute of Molecular and Isolopic Technology in Ciuf-Napoca is specializing in research on the separation graphs. At the same time, the institute produces until itolic stable isolopes and the building of instruments adoptate or uncounting stable isolopes. The Ciuf institute wakes of power programmo by devising, italigning and making labig speciameters for the analysis of doubting, toble

PEOPLE OF THE HEIGHTS

Sometimes we are analzed at the architectural ligure of n high rise. Let us say, o ten-storied block. What would we do it we were faring o 100-storied block? It would be should be should



ohimney stacks. pro-compression, having lisseal in Bucharosi. Among the numerous buildings of this kied are those at the Glass Factory in Buchathe Glass Factory in Bucha-resi, ni tha Pelrechsmical Workn in Pilsgil, ihosa in Tuloca, Iagl, Siatina, Arad, Zolau sic. There to no lor-gar town in Remanin where this isom has not built ac-mothing. There are 300 such

siacks for various purposes op iha whela. Bul wilhia ibe ahove-maniloned unit many by the line and drumming technologies have been assimilated, some of them being thought out by engineers working in this collective. They have had positive eitself in increasing the rais of execution of these lowers and stacks and, of course, in increasing them has recently been opplied to the building of noch an objective in Turnu Eeverin, it is a matter of applying a stipping solution to the skelsten which together with other building matter of the manning and working lima from 225 days to only 130 days. It is apportantly one, both the quality of the flatching and of the huilding one, both the quality of the flatching and of the huilding init many the

PROGRAMME

Daniel Baran, e
physician from tha
icwn hospital in
Boran (Maramuros counly), an onthusiast for
companior lochnology, and
the experis from the Insiliula of Salantific Reacarch cod Technological
Engineering for Compufor Technology and Informatina in Bucharent
baye underinkan to make bave underlakan io make oompulars help in the hoallh-care struggle. Thus, the Medat hardware-soft-wara was born. It is designed for the compular handling of the medical data of out and inpatients. Thanks to Medot, observation cards including all data related to the patient during his hostilalization. liospilalization, elinical chaervations, summaries of the operations porautomalically. Buill for 100-bed korplial, the new bardware-roftware to to he improved by speek

lists from the above men

Hound lastilute.



which ibs most cilicient ore the wnier, gas or steam microse and tensional scilve solution injections, etc. Several off ileids bave used tha mained of controlled in situ combustion. The method has been extremely nuccessful on the strength reserved. cessful on the stroutures of the Videle-Balaria and Suplacul da Barcan aroas. The method of steam infection bas been success-

The territorial electronia romanter centre in Cluj-Napoca, a unit set up in 1919, has worked out new computer software. Interred, for instance, in a package of programmes meant to provide decision-makers in enterprises with a useful and ellicent ald in the selentific substantiation of decisions. Interceb does not

the substantiation of de-cisions. Intercob does not runite may knowledge of informatics from the users. The subware can be used in a "conversa-lional" mude, the deci-sion-waker talking to the

Romanian oli-indus-

UNDERWATER EQUIPMENT

While biniogists of the Remontan institute of marine rescarch in Constants try in penetrale oven decire the life and physiology of fish, engineers had by Dimiliru Dinu make elforts to supply researchers who frequently change out of their laboratory overalls into tragman's costumes with increasingly better diving technologies, underwater equipment, apparatus for occanogrophic investigations, they have designed a series of original coulpment. Surressfully tested were the mechanization of fishing operations. They have designed a series of original coulpment. Surressfully tested were the first underwater tv cameras empirising components of Romontan habisity and lighting opparatus for law depths. Conceived was an installation of welding and cuiling underwater as part of which oxygen is injected through the alcotrode under pressure. Drawing bears injected underwater vehicle provided with it cameras and sensors supplying information about the satinity, temperature and depth of woter. Everything bears the mark of the special that weather have the respectance of the properties and residence of an air-lift system.



SUPPLE "ANATOMY"

The specialists of the Electrocontact enterprise in Boloquil hove enriched the list of products designed and built by the unit. Starting from their own researches they designed and built as original electrostatic copying machins with plates. It is less sophisticated because it can copy on any support, not nacessarily on a special

RECOVERY TECHNOLOGY

The colinboralica helyseen the sposialists of the Polylechnic Institute in Cluj-Nepoca and the Mining Works for Non-metal Substances in the same lown has led to the linalization of industricity applicable technologies of reconditioning vertous parts for excavators, buildozors, borses, nuclor-compressors cod conveyor belts. So far over 16p parts have been factoded in the list of reconditioned ischnical perameters. Used for their recovery are the technology of powder metal angineering, build-up wolding, ionia nijriduiton, ale. In 1987 alone imported parts worth 21 million fol were neved up.



MEDICAL INDUSTRY

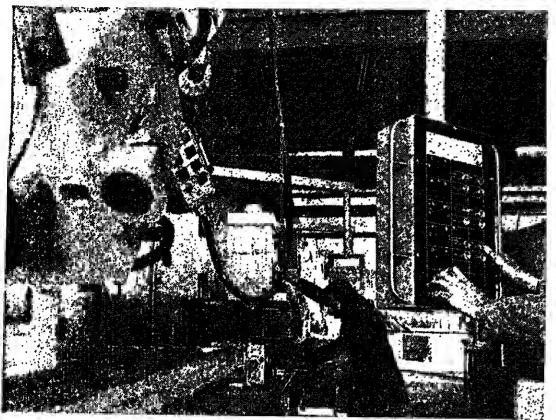
Electroteinica Enterprise in Buchnest posts and the new magnetodisting apparamented in its classified list, a range of instruments. Thus, on the assumbly lines is the Rentments in low pressure magnetical interpretation of the Heids.

New technical aren-itons have been linelized by the lipalizad dy ide Blealrie Measure Appa-rolus Enforprisa in Ti-misoara. Of them, wa ohould meniton Redac on device for charging neounutations. The appearinn to the size of a desk
telephone, beasts a madorn design and includes
a display. The device has
numeroun advantages inoluding that of accusitoolly and optically signatling arrars which cap appoar in the process of
oborging hatteries, ipatr
is an installation meapl
for atarling numer vehioles in low tenyeraturn
environments. The robot
can be used for charging
all types of accumulators
and for siarling such yobiolen as friedors and
litting. Flasily. Mojor
Texter is an apparatus
halping less experieeneds
divers.

ROMANIAN NEWS

• ROMANIAN S

THE SINGLE NATIONAL PLAN OF ROMANIA'S SOCIOECONOMIC DEVELOPMENT IN 1988



THE SIGNIFICANCE OF SOME **PLAN INDICATORS**

As we informed you in our inst issue, of the end of lost year the Grand National Assembly (Parliamant) unanimously possed the Low on the Single National Plan of Romania's Socioeconomic Development for 1988. The participants in the debotes high-lighted President Nicolae Ceouşescu's decisive role in working out and inving an scientific bases, in keeping with a unitary nutlook, the lines of the country's socioeconomic development in 1988, in thinking out and applying the programmes of stressing the qualitative, intensive sides at production, improving the organization and modernization of production, perfecting economic-financial activity, increesing the efficiency of the entire social work.

The whole content of the pion reflects the orientellon towards emphasizing the quellictive sides of economic grawth, the course towards on intensiva-type reproduction, the substantial increase of efficiency in all activity sectors. Noteworthy in this respect is the much higher growth rate of the antional income - 9.0-10.0 has compared to that of the social product which will be per cent — compared to that of the national income — 9.0-10.0 per cent — compared to that of the social product, which will be 6.0-6.5 per cent. Such an increose in the national income will secure both the funds necessary for overoil development and those enrmarked for possing on to raising romaneration by some 10 per cent, while further promoting a firm policy of price and toriff stability.



The Bucharest Henry blothine Interprise is mountacindicay a unit for the power inducty (top). Asperts home a laboratory of the Fonduleo Cereal and Technical Linguistics. Research lastitute and from o plot where neer wheart and boiley strains and hylaids ore 'successfully experiment-ad (middle and bottom right).

AGRICULTURE

When in 1084 Romonin chinined for the first time in its bislary a cereal ingrees larger than 20 million tuns, the praduction of a tan of coreals for every clitzen was conshiered a gross agricultural newformance.

tural performance.

But, in the ensuing years — 1985, 1986 and 1987 — visibly larger productions were pleaned and harvested. Thus, to the last two tide has topped 30 millen tens. Large creps have also here resistered with fedder, technical plants, vegetables, fruit and grupes. At the same time the quantities of tivestock products achieved in Crops of eight or nine thousand kg of wheat or more than 20 to maize per ha which five years aga were considered to tanch the highest possible ceiling ware reased in the folis of 1986 and 1987 not from experimental plots but from secres of thansand hereafters. For such average productions obtained throughout the cultivated area, handrads of farms received the high order of "There of the New Agrarian Revolutions". The presence of such standard Romanian agriculture.

Naturally, it would be an flusion in adapt as plan provisions.

Naturelly, it would be an fliusion in adopt as pism pravisions the figures estentiated on the basis of these record outquis. However, their existence onbitantiates the provisions of the flaw of the Pism of Development of Agriculture, Food Impostry and Water Management for 1888.

The main infleature show first of sit the consistence of the high growth rairs of this branch.

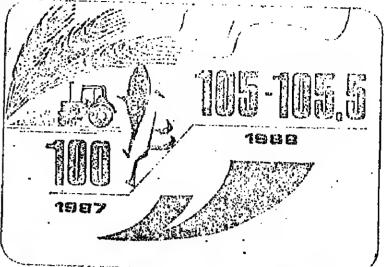
The overall farm output will increase this year by 5.5 per cent os systems that of last year, the net production by 6-6.5 per cent, while the industrial gunds production by 7.5-0 per cent, confirming that Remonta cumilance to promote a highly dynamic ugrarian policy.

The law not only asserts plan figures but also substantiates them by Indicating realistic solutions for the growth of form coupuls. This year, loo, siress is laid on the complete and intensive usage of the land stock, on the recovery and recycling of these arms which in the past were nureasonably affected for constructions and

This year loo stress is tall on the intensive use of the land slock, on the recovery and reclamation of those array which in the past were unjustifically used for buildings and other nuu-furning

The law further rails for the introduction and expansion of the most productive varieties and hybrids, the use of seeds from superior blubgical categories, the strict observance of production legislations. notagles. Animal breeding has he view the improvement of reproduction, breeds meliaration, the growth of production in all farms where animals and poultry ore raised.

Under the law selentific research is to contribute to the intensive development of Romanian agriculture, scientific institutes and stalling ere required to work out new terbulogies for restoring and enhancing the fertifity of soils, especially of these croiled, sandy and sali-salurated, to create new high-yield strains of plants, more resistant to low temperature, drought and other unfavouruble environment candillons, to improve genetically the animal breeds, to fully empitalize on the existing fodder base, astural pastures and hayfichis included. Finally, omphasis is placed on the technologies implying a low consumption of chemical substances with a view to reducing the poliuling effects and conserving the qualities of the environment.



GROWTH OF THE GLOBAL FARM OUTPUT



000 TTITT

DYNAMICS OF THE INDUSTRIAL MARKETABLE PRODUCȚION

EDIT PERMIT

THE RESERVE

Contraction of the Contraction

there is the state of the state of the

achievements

Romanian inshertry. Wark

Is under way at the Bo-

chorest Machine-You and Unit Enterprise on o so-

ries of programme con-

trolled lother flop left). A naw ention knitting loc-

tory lins eccently game on strenm al Ponciu

oporulions on o now soc-

tion of the undargenund conlinue in Bucharost. Working aspect from the

sono betwarn the futuro stations Bucur Obor and Siction cel More (right).

Constitucilen

(midd(e).

INDUSTRIAL RATES

In 1088 industry will continue to represent the fundamental companent of the policy of aconomic development in Ramania. According to the plan, this year the vina of goods production will increase by 7.0—9.0 per cent as compared to last sear, sod that of net production by 11,0—12,0 per cent.

The plan loys special stress

The pisn ioys special stross on expanding the base of raw malerials, improving manufacturing structures in the processing industry by giving priority to the growth of high-tech

branches,
Special tasks are ossigned concerning the growth of the production of the extractive and power ledusiry, especially with oil, piteosi, lignite, nou-forrous ores and coal-hased electric organizations. branches nergy. For metallurgy and mo-ohino ondincering the plan sil-

1988

PULFILMENT OF THE INVESTMENT PROGRAMME

Through lis provisions, the plan ensures the increase of lebour productivity in the republican industry by 8—9 per cont, of the degree of asplialization of raw and auhsidiory materials, fucis and energy, including recoverable and ransohe sources. According to the pism, the netivity of scientific research, tachnological devolopment and talreduction of technical progress with substantially contribute to loplamenting the programmes of inlensive devolopment, of improving organization and modernizing production processes, to batter capitalizing raw malorials, uplifying the tachnical and questiative level of production and reducing meterial and energy inputs. For attaining these chicativas, the plan stipulcion emeng others the improvement of the existing rewmeloriei processing technologies and he devising of now updated onas, the assimilation of now, botter majoriels, machines and equipment, the improvement of the typification, standardization and normarting contributions. nicht of the typification, stand-ardization and norm-setting eo-tivities. Finally, as is but natu-ral, fundomoutoil research will organically intertwina, from now on too, with the applicativo one while the link between research, education end produc-tion will continue to be streng-

In 1988 the total volume of investments in the ocenemy will top 255 biliton fol. Investments will be primarily permarked for implementing the updating and rollegoring programmes; also adjudated is a substantial out in the spare of construction works in the overall investigents.

Thus, as far as industry is concorned, as in foot all branches of the national schoomy, the pian lays down the projects is be ashieved with olse providing the requisite financial instantial and lumina means.



SELF-MANAGEMENT

Aware of the fact thei we cannot consume more than we produce, we intend to further increase the volume of faronfood goods and af industrial consumer goods. This priacipie is elso abserved by the Programma of self-msusgement and self-supply for the onsurance of the belier supplying of the population in 1988, a programme itset the country's partiament deheled and voled. Stimulating the elfarts for raking initiation the effacts for raising the outpuls, of turning in good account all the resources we benefit hy, ere primarily view-

According to the pravisions of tha Pragrammo, even as compored to last year, a significant

> A BALANCED BUDGET

Remania's 1088 sialo budgel, adopted by the Orand National Assambly, comprises the stote's centralized locamee oud iheir carmerking, in kooping with the targets af ibo Singin Neticnal Plan,
Exponditure for fineoong the netionel coonemy was eof at: 178,184.3
million loi, which accoaniz far some 41 per cont
of total budgelary spending, Planned socioculinral
isocoling totals 99,883.3
million toi, that is, almost
nice times more than the
lund allotted for the
country's defense, which
rands at 11,551.5 millionlei,
Beyang California.

lef. Heyend the inutilitude of figures laid down in the document to which we are referring. It should be stressed that the year lee Romanie's budy so will be parectly balance, both targeted in tomes and expenditures and expenditures and expenditures incoming? 162 433,092.7.

growth is ensured in the deli-veries of man, meat products and acoked food, of fish, mlik and milk products, vegetables, potatoes, fruits, etc. For lostac-too, on average mast consump-tion of 70 kg per capita end 15 kg of fish per capita to pro-vited for.

The figures of the plan are of course, scientifically grounded, being correlated to the column course the column course of the consumption and the consumption all a pace with the enipassing of the planned outputs.

On the other hom, to the a-mounts of larm-food profinets distributed by the contral state fued ers added those produced in the private households, whoro thare are bigh numbers of fawis, pigs, cattle, sbeap, elc.

As campored to last year, thoro will also be a growth in the industrial coosumar goods, lang-run ones, household appli-onaes, ate, laaluded, whace renge will be diversified and whoto toakulcal-operational :matera will be raisad.



1988

INCREASE OF THE NATIONAL INCOME

QUALITY OF LIFE

The fundamental purpose of the whole Romanian policy is the permanent reising at the instantal and cultural living standard of the people.

As we have already said, this year will sou the beginning of the action of ingreasing the remunerations by to per cent. At the action of ingreasing the remunerations by to per cent. At the economic units, the central and local bodies are to take measures for the firm application of remunoration principles and distribution of the incomes in working people, in order to correlate incomes to the work performed, to apply the everall and direct agreement.

A large spectrum of magistres devoted to raising the quality of life is included in the Programme regarding self-management and self-supply, on juritorial level.

The plan also provides for measures on the continuous improvement of health and sucial care, with a stress on preventing disease. As a conclusion, let us mention without coing through all the provisions of the plan in this domain that this year, 150,000 apartments will be commissioned, out of which 24 thousand in the country sides.

Furniture tiente monufactured by the units of the

wond-processing plant in Pistra Neamt are in increasingly high deciand on foreign markels. All the cond of last year, the specialists of the works designed new types of furniture fee the collections of 1988, techning period atyle hedrooms, the Core living room, as well as

living room, as well as other types of small fur-niture. Aucther nevelty:

tho wood-processics works has already turned cut the first quaetilico ef

dustry products are ex-peried le ever 70 couel-

The Terem ayntha-

lle fibres works in

ries on all ecatineets.

lasi has homelese-sted and nesimilated n

new product. Wo are ro-

ferring to lie consiscalor

fibro with philialle anhy-

drine, a product tinalized

on the bosis of lechsolo-gles worked out by spe-

cialisis of the Inst works.

It le meaut for the leather

new fibre bossio remark-

obic physical and moobs-alcat properties.

nbsillules industry. The

A RAILROAD IN THE APUSENI MOUNTAINS

Reconfly, the Dava-Brad rollrand bus been commissioned, improving public and goode trensport between public and goods trensport between the aunthorn region of the Apuson Mountains and ether localities in the country. The railway ocvers new only 36 km, as sompared to 318 km accoufing fee the eld, winding route. The building of this new railread im-posed the construction of 77 bridges, 10 viaduois, four lunnels. Two millos en.m of rock were excevated and al-most half a million cum of eccercio

MAMMOTH INSTALLATION

The enterprise of construc- | that of a block of flats,

The enterprise of construction-assembly and mining
equipment in Tirgu Ifu [inlohed the works on the first
trale caterulifier truck designst for equipping buckelwheel exeavators used in
cuel quarries, with o capacity of 1,600 cum of mining
mass exeavated per hour, fi
reaches a beight equal ic iy in exploitation.

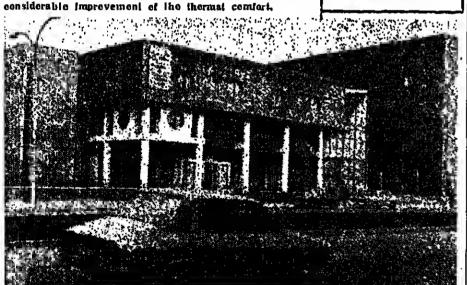
LIGHT WEIGHT CONCRETES

Specialists of the Central Institute of Recearch. Design and Bircettons in Construction—— the Cluj-Napoca occilon—have created new types of fight weight concretes, chiated by lufeding indigenous foams in the moriar mass. Their technolog-connoule ebaracteristics make them ever more useful, foam concretes successfully reptacing acrated tight weight concrete. They complets the range of thermoliusulating materiata preaceting at the asme time a series of advantages. The new technologies attuwe of chicking line product directly from the apectatized units.

The assimitation into fabrication of the new light weight concretes used as tosulating materials for roofs and as thermo-insulating tayers for perimeter walls in civil, industrial and agrezootechnical constructions leads to the considerable improvement of the thermat comfort.

Af the Unic Industrial high acheol in Snto Mare a team of Jonin graders (ageil between 15 and 161, Jeil hy englecer Consteniin Bruein, designed and built a rebet which, according in International alandards, helongs to the accond category. LUC-1 has four degrees of freedom and three translations. It can be kriven hydrouticelly and electromechanically, being antomated control, it can perform either live competee, independent eyeles of work or an unlimited succession of operations. Made for experimentationd didactio purposes, the robot rotses, jurnaround ond muyes paris weighing up to three kilograms, which it lays on the largelled oper with the largelled opel with

Af the Unic Indus-



MEDALS, PRIZES, DIPLOMAS

Remacian architecture is hocked by n schoot with eld-sinnding fruditions. This affirmation is not new for the specialists. New are just the confirmations of the value of these specialists who make it up. New are just the contributions of inconsisted evact of this genre was bested by the Bulgwiau city Soits. The world architecture blennia! — fNTEHARCH '87—gathered designs of 387 srebilects from 37 countries. A compotent specialist commission, acatyoed the reloifon between the elements, functionality, originality and sembleatice of building materials—and awarded ceverel imported distinctions. Among the works enjoying unanimous appreciation was enjoying unanimous appreciation was one signed by crebitects Harbu Poposeu and Stofan Borie, the former associate prefessor, the letter assistant prefessor at "foe Minou" Architecture Institute in Bucherest. Their design—ino Heese of Soicece and Technique for Youth in Statina (Off country), incougurated a sharf time hefore the competition—was owarded the silver medaf, the special prize and diploma of bocoor.

The fwo mediteds are in Remenia, smeng the best known creaters in the flaid of constructions for the young ganaretten. In their 17 years of work they designed, among eihers, the Culture and Bducatice

Comptox for Youth in Gainti which was awarded in 1686 the Prize of the Remacian Architects' Union, the House of Youth in Tirgu Jiu, Student Park in Buchorest, a design which else received a prize of the Architects' Union. Other designs by the Romanian architects are under construction: the Recrecition Complex, in Tirgu Jiu; the Youth House in Glurgiu, the Youth Complexes, in Medias and the lieocration one in Baccev (Argos conststy). In Selia, at the menticeed hieroital, within the design society, enother Remanian nrchitect, Flurin Bleinget from the Research Apparetus and Equipment Enterprise — IAUC Bucharest — wen the third prize with the work "Af the Some Time in the Same Place," The design logohousity and efficiacity empitalizes a series of scalification for the first time, At the previous lation for the first time. At the previous edilioe of the event be obtained two yaluable distinctions the silver medel add the Special Prize of the towe of Touloute for the ochlevement section and a brocks modal for the design section.

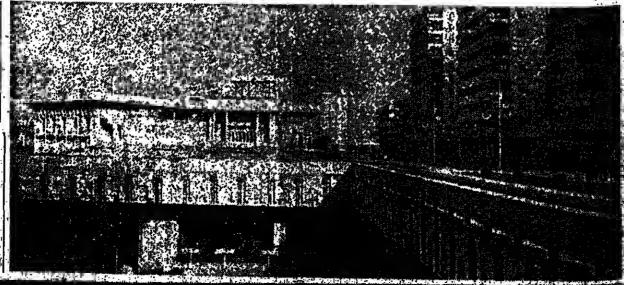
M. CONSTANT .

BAC 1f2 repre-nents the fatest achievement of Authurni enterprise in Buchareal, Mode in col-foborotion with the Hu-chareal Transport Enter-prise, the cod user of the now transport meens, it

by a blooking device for the meter oxio giving it the possibility to start on lee, elimb slopes in conditions of low schools.

A WORLD TRADE MARK

IfAARO is a mark well known in over 30 world countries. Il beforgs to the Mechanical Enterprise in Romao. Now types of machine feels with superior technice-fupetions; chorecloristics have been made here. Among them is the verifical laike with a processing districts of 1,600 mm, it has numerical coulted, and a driving pinterest of the processing at 100 percent productivity increase. The verifical laike for wagges whose processing, which was highly appreciated at the verifical entities are two other appeals another for roller thread cuiting are two other nevotices.



ROMANIAN

ROMANIAN

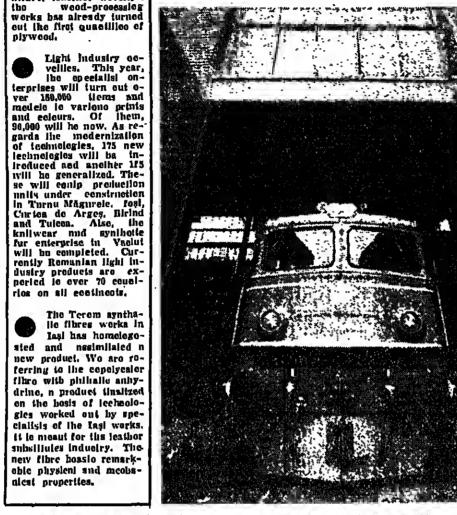
ROMANIAN

3,500 ENGINES

The 2,100 hp Blesci-electric gathering focomelive is a coverily produced by the well-knowe Electropatere plact to Craleva. This type beasis performances ensuring fis operation in various climate conditions.

In the 28 years which have clapsed since the construction of the first locomective, the emblem Electropatere has been togethed on more than 3,500 clerific and Blessi-slectric engless of large capacities, executed in 12 types and vaciants. Approximately con third of them have been experied throughout the world.

At the beginning of 1988 the enterprise has introduced in the beginning of 1988 the enterprise has introduced in the production line the first 2,100 hp Blessi-cleditic soginee as port of the expert programme, as well as the first Biosel-cleditic orgins of the same capacity designed for foraign partners.



"It wouldn't be possible cherwise. What would liss meaning of our work he was didn't succeed in loking from time o real physical profit. Day by day, year hy year. Parily, we make our life mers besultful with this profit."

These are the words of a 25-

These are the words of a 35-year old mayer. Livia Opritar-ou manages the public affairs of cu manages ine public affilirs of Parism commune iTimis coun-ly). Sha was clocied mayor in 1878. But until then har way hed been strown with hordoblys. In 1868 sho was nn apprantice at ao arliach's unit. Then ahe al-leoded a vocational school (c





Ared. The went to Timisours, where she graduated from high-scinol, the evening classes, Te-day sha in an extra-murni stu-dent of on ecosemic faculty le Bucherest, The position of ens-yor to Perlam — she sold — was on exam of political maturity for her.

Porlam was not a poor com-muse. Bul, at the lime she came bere it was not a highly daycloped osa either. There, came bere it was not a highly daveloped ease either. There were small timber, hriok, hais and caus factories. Teday, the industry of that pince looks guite diffarent. Its 1878 a naw section of the hal coferprise. Colortex specialized in do tuxe products was commissioned products was commissioned products was commissioned ture profile of the architecture profile of the architecture profile of the architecture position of the whole. You might wooder why so few of them ware built. 120 comfortable apatiments on the whole. You might wooder why so few of them ware boilt. More than that was not hacastary. The eduting was not hacastary. The eduting service units ware size hills. Bight in the centre of the town.

The additionant has 8,000 the battiants. There are two dispensaries. Two general schools, and agricultural biguischeel, where, under the subservicion of specialists the fifter itechnishs.





ROMANIAN NEWS

LIFE AS PROFIT

study. It is very important—Livia Oprifescu said— lo rely on cortiludea during onc'o leens, Aa tho profescional activity in Perlam showa, 80 pur coul of the inhabitants ond labour lerco is tomale, adequato jobs are being created. On the mnyor'o agonda there are projects for the medernization of agriculture. The producer cooperative farm is one of the bost units in this country. Bumper grops are barvested from large sreas. About 8,000 ba. Tree-growing— the Perlam peaches are famous— covers over 600 be. A few yeare age, the farmora go-

thered under 2,000 kg per ha of wheat, bortey, ourn, 800 kg of sunflower, acybesn and boans, about 13,000 kg per ha of ougar boel. Thanks le ito use of some new high-yield breeds and bybrida, "Lovin-34", "Fundulea-28", "Libeluia", foe wheat, "Sonia", for corn, "Altroj" for baricy, le re-arranging the solie and infreducing the 4-year croprotation smi clae thanks in the collaboration of the specialista at the Lovin Agricultural Research Station and those of the reacarch base of the Institute of Chemistry in Chul-Nepoce, belier and beiter results have been secred. Last year, 6,100 kg of wheat, 8,200 kg of bariey, over 23,400 kg of soy bran, 3,800 kg of singlewer, 2,300 kg of sugar boet per ha were obtained. For their results, the tarmers in Perlam were awartied the "Agricultural Aterit" under third rioss in 1983, sml second rlass in 1981 and 1985. For the above mentioned when the wardend the "Here of the New Agrarian thermining this in 1986 we expect the same distinction — mayor Livia Optificational presented in the Turner to the same distinction results armed this year. standing results senced this year.

M. CONSTANTINESPIE



Compored to 1965 the amounts alletted per capito from the state budget far health care have increased mare than thrae times,

While in 1965 the number of Jshy-63 sicians was af 27,900 taday it surpasses 48,000. In Romania, a physician takes care of 475 Inhabitants. This is a ratio registored by a small number of countries in the world.

In 1986 the haspitals had a total number of 204,200 beds. Lost year new traspitals were built in Simleu Silvaniei, Calafat, Oróstie, Rasiarii de

Vede. Other localities will saan enrich their dowry with hospitals ar haspitals and palyclinics: Darolioi, Adjud, Revinori, Negrești-Oaș, Beclaan and Giutgiu.

There are avar 1,500 enterprise dispensaries and 3,900 territorial dispensaries (rural or urban) in the whale country.

Health caro is frea af charge far all children in Ramania. Banuses granted to mathers who gave birth ta mare than one child have grown from 1,000 to 1,500 lei.

The girl's name is Luminita Nicolae and she works at the Institute of Tree-Growing in Insiliule of Tree-Growing in Maracheol (Arges county). Atiracted by lieso forms of the
living mailer — plants, trees,
flowers — Luminita became after gradualing from dilgh-ochool,
a rigerous laboralocy assistant
at the nbove manifoced insillele. After a abort period of
besitation, Luminita expressed
ber wish to altend the overing
closses of the Biology Faculty,
the Picett city (le the ocigbbourbood of Marachen locality
whare the Institute of TreeGrowing is sented). Her wich
same true wilbout any diffisuity. But Lumini(o still felt ifnat her deadlocks had not yel bosn brokes. So thei, after the necessory demurches, she went in iur ibs University is Clui-Napoes, she passed some examp and added suother two years in her studies. She got hue hiologisi's title ooi long age. And had as a mora formality. During hor lesroing yaors, Luminita Nicolae did oof cease to work i paliocity, obstinotely, even "feroclouely"— as the horsalf almits, Buf hee perseverage was not useless i bor face benming with a bright lener smile, she helf-opened the door of a refelgerator and showed us for a few seconds, the dowry she had so-

quired. The slory of that wealth can be reconstructed out of numberless detoils, out of ceends, hours, days and years of infolito minuteusss. In the begiouing, there was a tender, green bit, whose detaits esonol house with the enked cye. The vegetof fragment is rigorously atcelized a no virus, co pathegeneous sgent eac touch this frail being answere. Its evolctice passes through a test tube or a haloon where the "ohick" is fed with all the substances it ceeds. After six weeks, from the folly-like layer at this bottom of the test tube, there aprings a fbin, thread-like root. With a tot of precaution, it is then fransplacted to the greenhouse, for nectimalization. There follow some other weeks of weighted, of observations, put down in detail. And those, the much looked forward to wonder comes out recound the expinit the lip of the plant, not cop, but 80—16 sprouin appear, as frail as healthy. The rapid passe of multiplication on amail author in plant tissue of the benefits of plant tissue of the benefits of plant tissue of the benefits of plant tissue outfure. The absolot hooting from the very beginning, is anof the benefits of plant lissue of the benefits of plant lissue culture. The absolole heelth from the very beginning, is undended the reserver.

Biologist Lunninita Nicolas irusted as with a secret i in the fridge heef she special for a second there are 130 breats of strawberties. In hand of the grovers all over the country. It is much? If it fills ? The young researcher kindly forgives our government in hand of the grovers all over the country. It is not govern researcher kindly forgives our government of its is a superstite page. I shadden any law amporation page. I shadden any it awas little for a shortery. As a maller of fact, in our matinio, there is a complex of its successful which will plane soods for the whole country."

But of course on an industrial scale, which will plane, researcher has studies on froll frees cannot not be suffered to the limituits. The young researcher has also but a not play but he was a play and the government.

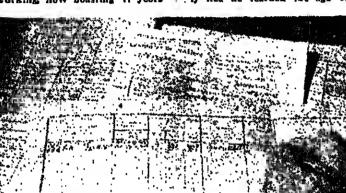
Y COSTRA

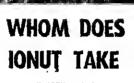
In the spring of 1979 a yaung cauple, gripped by the breethless intensity of their emotions, uttered on autright and solemn I do at the ceremany held in the Wedding House. Therefore, a new family was set up: Alexandru and Constanta Nostase. The moment — always unique for the newly-weds but quite ordinary in the eyes af witnesses - seemed to have no significant consequence far the young cauple either...

THE CONTINUER OF A NAME

Alexandru Nariase, o grodua-to from the Electronies fitch Behoot worked (and is still

wish. On February 18, 1980, they had their itral child — Razven Alexendru, a becutiful and re-bust new-born haby who was to corry on the name of Nasioec. From the cartiest weeks, the bay had become "the most in-telligent, sgile baby with the blocst eyes in the world, itardis hed he reached the age of





The girl grew fast, the boy los, having on escendaucy of live years over his stater, it was lime for Razvan Alexandru to allend the district kindergorien na. 80. And Marts Inflowed sull. 1983, 1981 and 1885 passed la an almosphero uf hormonious



One third of the Grand Notional Assembly deputies ore women. 40 percent of the people's cauncils deputies ore women. Over 16,000 women belang ta working peaple's councils in enterpri-ses and institutions and 22,000 were elected members of the leading cauncils of agricultural production ca-

Almost 45 percent of the country's economically active population is represented by wamen. They hald a share of 42 percent in industry, 75.3 percent in health care units and 65 percent in education, culture and art.

The spectacular progress registered by women In the sicentific activity - from 32.1 percent in 1965 ta some 44 percent in 1906 is warth men-

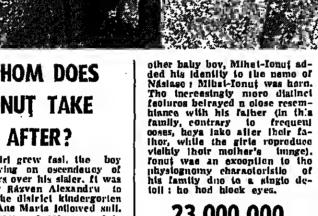
of uniferrupted service) at the enterprise of radio purts dual earniconductors in Bucherest, tio and his wife had been coticagues of the same enterprise, until...

until...
Alexandru was the only chils
of a widow (he rould hardly
remember his fother who had
ded of an unitimety denit). In
his childhood, and in ail tho
yeora before his marriage Alexandra had atways wished to
have at least a brother or a
stater... For her peri, Constants
had three brothers and two sisters (while her graudparous
had hed no loss than 11 offgprings).

Therefore, it is pass to prosume that the new family of Nat-tage aspired after fulfilling its duty : advarrantly different, the ir readous led to a sommon one year when his purents he-gan to feel sorry for having only one child.

THE YOUNGEST CHILD A BABY GIRL

The regret persisted, overly declared or not, comohow overshabed or not comohow overshabed with the large state of the Nariase family to have a con who techned staggered about and then walked limit through the house. But on September 19, 1982, a fair-histed and also high-overs. The come late the world—And there Nariase, A charating droit and milling dell the pungest child rounded of all the pair so much desired by Alexandry and Constants.



23,000,000

In the evonting of December 8, 1887, in on aburtment at 4 Agigea Alley in Buchmest, everyone was in an unusual a'ale of agliation. The elder children

of agliation. The elder children (one of clash, the other of fire years and a half) were sent to bed, white length was onleased to his groudmother.

When the clock struck 0.01, marking the day of December 3, 1987, the while half of the Mannicipal Hospital reverberated — surprisingly early even for the experienced medical staff — with the friumphant shirek of a baby announcing his onleanes into the world.

baby announcing his ontranca into the world.

In the morning of the some day, ar. Radu Bonescu visited like young mother, congratuating her with an extherence which he folt to be normed for the occasion: "You have a famous girl!" The girl's name was Elena-foons, it was established heforehand by her lother who was sure it wes going to be a daughter in order to make up the second pair. make up the second pair.
At the onterprise of redie

xendru Nāsieso wes welcomed by his colleagues with obsero which he ihough! were only ourmal, though they ecemed to exceed the frame of usual congratulations offered upon the hirth of a new child. He had not tearood yet the Ihrilliog piece of news: the National Commission of Denography had already ennounced early in the morning of Ducombar 3 that a haby called Elena toana Nāsiase rounded off the number of Romenia's inhabitents, naw amounting to 23 millions, Cablegrams thad been sent throughout the eventy spreeding the data of the eventy Romenian broadcasting stations and datiles anof the event; Romanian broadcusting stations and dattice annonneed the victorians piece of
news with justified haste. Snow,
iv reporters and pholographers
managed to break alt medical
rules, filling every news stand
with images of the mailier and
tim boby girt who had became
overnight Miss Romania of 1987.
Tho birth of Etena Joana
Násiase was on ordinary event
for all the Homonian days and
nights. But the piece of news
became lamons, enjoying the
offective suppart of a whole
nation, because the girt number
23,003,000 has a deep significance for the continuously growting human dowry of the country.

Now Elena loana Nasinoo has foliach the close brothers and sister. She grown by 200 grano a week t She amite in her sleep and her smile can be reed in her line eyes when sho wa-kes up. The Joy of a whole co-untry, her birth was a greet event for the Nasiase femily.

The Inergenic chamisiry lab of the apociatist feenity at Isal University is never empty. There you con cortainly find Mogda Petrovanu with the eindenia but clea atone, following a complicated research thome with procitoel implications.

Professor decier Magda Pa-irovona is a member of the French chemical accloss, of tha



Baikan diodical Academy and of other international coleulitic organizations. Lost year she haid specialized conferences is West Germany and France, she participated in presigious international chemistry congression. Her tociures were praised by parsonnities in the floid, "I have the grestest solistactions when my studente appreciate my technical my the distinguished professor. In feet what I presented them ever the years itse at the basis of the

years like at the basis of the first printed course of the Hatory of World and Romanian Chamistry.

Chemistry.

Last spring prof. dr. Magda Petrovanu participoted in the National Colloquium of Students Scientific Circles and was odifficed. Bayond the papers, high sejentific level, their original opinions, her students proved that they had indepted an idea day to their professor; she distill must not only have a brood scientific horizon. It is also a philosophic and cirtural one. They must be multipated one as lead to generally he man askels.

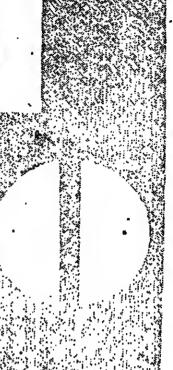
Such an ideal for which the hag appendanted by pleaded during not entire britishing ideactic sarcer made her become a member of the Romanian National Committee. Solimitat and Peercon Because the solimon can be people.

CONSTATIN LEFT M

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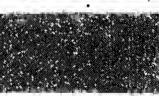






As regards its pharmacotheropeutic action, GASTROZEPIN has a shorp selective ability. It has a strang offinity to muscalinic receptars, especially of the level of the exagenous glands. The system of linkage to receptors has special characteristics, different from those belonging to otropine-type anticholinergic agents. The product blocks the acetylcholine receptors of the parietal cells of the stomoch, functioning as an inhibitor of the gostric acid secretion.

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Reduces vascular resistance at the level of pulmonary vessels. Improves bload circulation especially for potlents with functional arteriopothy, Systemic blood pressure is not generally influenced by thera-Peutic doses of Sermion.

INDICATIONS :

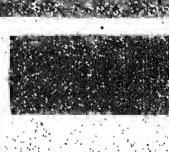
Acute or chronic cerebral vascular insufficiency (atheroscierasis, cerebral thrambosis, embolism, cerebral ischemio), ocute or chronic peripherol vascular insufficiency (abliterating vascular offections of the

Raynaud and other syndromes accompanied by the alteration of peipheral circulation, headaches. As adjuvant in the antihypertensive therapy.

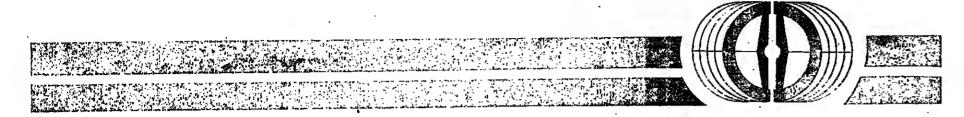


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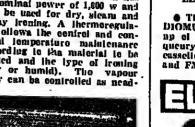
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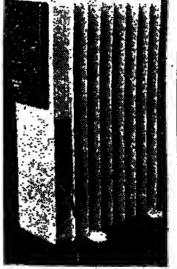
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